

Mouse-Size Opossum

ONE OF the favorite forms of natural-history interest in almost any community is the finding of live things in bunches of bananas. It is a poor grocery store that cannot have its annual tarantula scare, and sometimes other creatures even more strange come as stowaways on the little steamers that ply between our Atlantic and Gulf ports and the fruit lands of the Caribbean.

Once in a rare while one of these stowaways will be no insect or other many-legged ogre, but a tiny, blinking, somewhat scared mammal about the size and color of a mouse. Probably such visitors are more frequent than the records show, but are killed and given to the store cat as mice and therefore familiar pests.

As a matter of zoological fact, however, such a tiny furred visitor is apt to be one of the rarest prizes a northland naturalist can capture. If you are ever so fortunate as to see a mouse-sized animal clinging to a bunch of newly-unpacked bananas, examine it critically. It may look like a miniature opossum, with slightly rumped fur, wide, inquisitive ears, clinging tail and all the other marks of the traditional Down-South Darky's favorite "eatment." If it does, it is a real opossum, the smallest of all opossums. The species lives in the jungles of tropical America and nowhere else, and wanders out into the banana plantations occasionally as its bigger relative up here raids cornfields and truck patches. And once in a long while one goes on an involuntary ride and never gets home again.

Science News Letter, April 18, 1931

A new process of making carpets uses goat hair for the pile and dispenses with the use of a loom.

NUTRITION-CHEMISTRY

Two New Essentials

From Page 244

At present its identity is hidden in the complexity of the brownish, somewhat crystalline powder that Dr. Rose's laboratory records describe as the "active fraction" of casein, the protein contained in milk.

Extensive feeding experiments upon white rats led Dr. Rose and his co-workers, Dr. Ruth H. Ellis, W. Windus, and Miss Florence Gatherwood, to the finding of the new life essential.

The protein portions of the food given these animals was replaced by highly purified amino acids, which are known to be the chemical building blocks out of which nature constructs the necessary proteins in food. Proteins make up one of the classes of foods in our diet, and they are contained most extensively in meats, milk products and other such foods.

Thyroid Not Always Necessary

All the twenty known amino acids were used in the diets of the rats. If these twenty chemical compounds were all that make the proteins of natural food satisfactory for growth and maintenance, then Dr. Rose's rats should have grown well and waxed fat. But they did not. They were not getting something that they needed in their amino acid substitutions for protein.

Starting the search for the unknown food essential, Dr. Rose added small amounts of casein from milk, gliadin from wheat and gelatin from meat to the rodent menus, in order to find where the new essential occurs in nature. The casein helped the rats to grow. By chemical processes this protein was split into pieces until finally a fraction was found that caused the animals to grow normally when just five per cent. of it was added to their purified amino acid meals. This fraction is obtained from the casein by butyl alcohol extraction under appropriate conditions.

Dr. Rose cannot yet assign his hitherto unrecognized food factor to a proper place among the vital food essentials, such as vitamins and amino acids. More research will be necessary before this can be done. It may prove to be an amino acid, of which twenty are known to science. Four out of these twenty are known to be absolutely essential to life. These are cystine, tryptophane, lysine and histidine.

Science News Letter, April 18, 1931

HORTICULTURE

Soil In Seed-Beds Electrically Heated

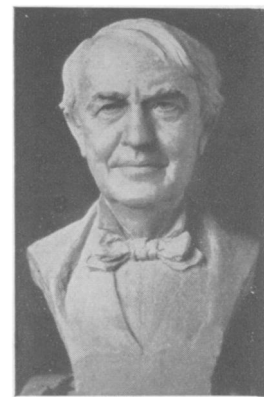
HEATING the soil in seed-beds by electricity, to hasten sprouting and early growth of plants in early spring, has been tried on an experimental scale in Sweden and Germany and is considered economically promising by Oskar Schwenninger, a Berlin engineer.

The heating units are cables of suitably high resistance, insulated and buried about a foot under the surface of the ground. It has been found possible to maintain a good germinating temperature in the soil when the air temperature is near freezing.

Science News Letter, April 18, 1931

Ancient inhabitants of Peru obtained wool for weaving from the alpaca, the llama, the guanaco, and the vicuna.

SPENCER SCIENTIFIC AND EXPERIMENTAL WORKS
4503 Wolff Street, Denver, Colorado
Optical Engineering and Designing
Repairing and Special Work
Assistance in Experimental Work
Instruction in Technical and Scientific Subjects
Astronomical telescopes, reflectors, prisms, gratings, lenses, standard flats, gauges, optical instruments, supplies, patterns, castings, agate work, crystal specialties, testing, and used equipment.



Announcement!

THOMAS A. EDISON

by

WALTER RUSSELL

For the first time educational institutions can procure the bust of one of the most famous and best-loved men of science—Thomas A. Edison—whose benign head will prove an incentive to budding scientists. P. P. Caproni and Brother have the honor of the exclusive rights of this work of Walter Russell.

The bust can be furnished (F.O.B. Boston)

In ivory finish \$28.00
In bronze finish 35.00

Send us your order now

P. P. CAPRONI & BROTHER
1916 Washington Street
BOSTON :: MASS.